Kevin McManigal

Apps of GIS

1/27/23

**Crater Lake Map (Map Tutorial Template)**

To start, I used the data supplied of Crater Lake and Oregon for the Switching to ArcGIS Pro workbook. After running through the exercises, I created map just for fun. I decided to show the topography of the lakebed, and found a cool Middle Earth style online that was applied to the symbols. These are the main tools that were used:

1. Create Hillshade: Use the Hillshade tool on the DEM provide. Left the defaults and saved to the GDB. Changed the raster resample to Bilinear (on all Rasters), and modified the Hillshade to go from white to grey, instead of black. Placed original DEM over Hillshade, set a natural color scheme (Ramp), and made it 50% Transparent. Also added a transparent satellite layer to give some texture.
2. Used the Bathymetry contour lines to create a lakebed DEM with the Topo To Raster tool. Make sure to choose which attribute field has the elevation for the contours. Used Extract by Mask to cut the Lakebed DEM by the Lake Polygon. Then, the Hillshade tool was use on the extracted Lakebed DEM, and all the layers were symbolized similarly to the full extent shaded relief. The original bathymetry contours were also styled with indexes at evert 200 ft.
3. Imported some extra symbol styles and colors from old ArcMap material used in the past. In ArcPro, choose the Catalog View, and then under Styles, you can see the defaults. You can copy default styles and save them into your favorites, but you can only modify the copies. Right-click on the Styles folder and you can Import old .style files, which will be converted to .stylex for ArcPro, and placed in the Project folder. You can also Add existing Pro styles, and create New blank styles to use. When a style pallet is right clicked, chose Manage, and all the styles are shown in the Catalog Pane. Only sytles saved to Favorites will be available in a New ArcPro Project. Otherwise, they must be added again.
4. Added the MyPrecious.stylex from this [blog](https://www.esri.com/arcgis-blog/products/arcgis-pro/mapping/we-wants-it/). Used John Nelson’s awesome Middle Earth styles to make a Tolkien’esk map of Crater Lake.

